



# Science Mission Directorate Fellowship and Partnership Opportunities

## ● Education and Public Outreach E/PO

### **Cooperative Agreement Notice (CAN) for Science Mission Directorate (SMD) EPO Division Support Groups**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open > Solicitations" when released) This CAN seeks proposals to support the coordination and integration of the myriad of EPO activities sponsored by the SMD in higher, elementary/secondary, and informal education as well as outreach. Four awards, up to duration of five years, are anticipated, one each for the four Science Divisions: Astrophysics, Earth Science, Heliophysics, and Planetary Science. Proposals should clearly articulate its approach to the support function that extends the value of SMD investments in EPO and promotes coherence across SMD and the collective contribution to NASA educational goals.

### **ROSES E/PO Supplements**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open Solicitations" then "Research Opportunities in Space and Earth Sciences" - see Section I(c)) Principal Investigators of selected research investigations have the opportunity to receive supplemental E/PO awards. Supplemental E/PO awards are used to encourage engagement and participation by research scientists themselves in education and scientific communication by adding an E/PO component to their "parent" research investigations. The scope of the supplemental E/PO awards include all aspects of higher, elementary/secondary, and informal education and public outreach, except student support at the undergraduate, graduate, and postdoctoral levels which is either already a part of the parent research award or provided in other competitive opportunities (e.g., NESSF, Hubble Fellows, etc.) Efforts promoting participation of underrepresented groups in Earth and space science studies at all levels of education and strengthening such learning in minority serving institutions are encouraged.

### **ROSES E/PO Projects**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open Solicitations" then "Research Opportunities in Space and Earth Sciences 2006" - see Appendix E.6) The "Opportunities in Science Mission Directorate Education and Public Outreach" solicitation is for investigations or projects utilizing SMD content supporting NASA education and public outreach objectives. It solicits proposals that address substantial and substantive educational needs or problems and offer solutions of significant impact. Projects are expected to be relevant to NASA SMD Education portfolio. This relevance should be clearly demonstrated in the proposal. Notices of Intent to propose are due February 7, 2007, and proposals are due April 4, 2007.

## ● Fellowships

### **NASA Earth & Space Science Fellowship**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open Solicitations"; solicitation is posted around November, with applications due on February 1; previous solicitation may be viewed by selecting "Closed Solicitations") The NASA Earth and Space Science Fellowship (NESSF) Program – 2007/2008 Academic Year, solicits applications from accredited U.S. Universities on behalf of individuals pursuing Master of Science (M.Sc.) or Doctoral (Ph.D.) degrees in Earth and space sciences, or related disciplines, at respective institutions. The purpose of NESSF is to ensure continued training of a highly qualified workforce in disciplines needed to achieve NASA's scientific goals. Awards resulting from the competitive selection will be made in the form of training grants to the respective universities with the advisor serving as the principal investigator.

### **Early Career Fellowship Program in Planetary Science**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open Solicitations" then "Research Opportunities in Space and Earth Sciences 2007" - see Appendix C.22) The Early Career Fellowship program was established to facilitate the integration of new planetary science researchers into the established research funding programs and to provide tools and experience useful when searching for a more advanced (i.e., tenure-track, civil servant, or equivalent) position. Two proposal opportunities are offered under the Early Career Fellowship program in ROSES-2007. The first is an opportunity for researchers to be selected as Early Career Fellows. Early career researchers are encouraged to apply for the Fellowship through any participating Planetary Science Research Program element of ROSES. The second is an opportunity for current Fellows (selected in a prior solicitation) to apply for start-up funds. Selected Fellows have the opportunity to apply directly to the Early Career Fellowship program for up to \$100K in start-up funds when they obtain a tenure-track or equivalent position.

### **Chandra Fellows**

URL: <http://cxc.harvard.edu/fellows/>

The Chandra X-Ray Observatory (CXO) Postdoctoral Fellowship program sponsored by NASA awards Fellowships to recent Ph.D.'s in astronomy, physics, and related disciplines. Chandra Fellows hold their appointments at a Host Institution in the U.S., for research that is broadly related to the goals of the Chandra satellite. This research can include new Chandra observations and archival analysis as well as related theoretical and observational studies of X-ray sources at all wavelengths. However, the main criterion for proposal review is the contribution to the understanding of X-ray sources, and this may be specifically appraised for continuation of the fellowship after the second year. The Fellowship duration is three years (subject to review after the second year and to availability of funds from NASA).

### **Hubble Fellows**

URL: <http://www.stsci.edu/institute/org/spd/hubble-fellowship/hubble-fellow-overview>

The Hubble Fellowships support outstanding postdoctoral scientists whose research is broadly related to the scientific mission of the Hubble Space Telescope. The research may be theoretical, observational, or instrumental. This program is open to applicants of any nationality who have recently earned (or will have earned) their doctoral degrees in astronomy, physics, or related disciplines. The fellowships are tenable at U.S. host institutions of the fellows' choice, subject to a maximum of one new fellow per host institution per year. The duration of the fellowship is up to three years: an initial one-year appointment and two annual renewals contingent on satisfactory performance and availability of NASA funds.

### **Michelson Fellows**

URL: <http://msc.caltech.edu/michelson/fellowship.html>

The Michelson Fellowship Program invites applications for postdoctoral and graduate student fellowships in exoplanet research at a US institution. Fellowship applications are encouraged for a topic related to exoplanet science or detection technology. Proposing technology development and/or astronomical applications of optical/IR interferometry and/or coronagraphy is particularly encouraged; proposals relevant to the technology development or science of Navigator projects, both experimental and theoretical, will also be considered. Postdoctoral fellowships are awarded for two years with an optional third year, and must start. A Ph.D. in astronomy, physics, engineering or related discipline is required prior the start of the funding period. Graduate student fellowships are awarded for three years. Applicants must be enrolled in a US graduate program in astronomy, physics, engineering, or related discipline. Students who are accepted for enrollment by the proposed host institution are also eligible.

### **Spitzer Fellows**

URL: <http://ssc.spitzer.caltech.edu/geninfo/fellows/>

The Spitzer Space Telescope Postdoctoral Fellowship Program provides an opportunity for highly qualified recent postdoctoral scientists to conduct independent research with the goal of enhancing the overall scientific return from the Spitzer mission. This can be accomplished through a proposal to conduct new observations with Spitzer, through exploitation of Spitzer archival databases, or through research that aids in the interpretation of Spitzer results, including theoretical investigations and laboratory astrophysics. Research must be conducted at a U.S.-based Host Institution chosen by the Fellow.

## ● Internship Opportunities

### **Lunar and Planetary Institute Summer Interns**

A 10-week research experience for Jr and Sr Undergraduates at Johnson Space Center/Lunar Planetary Institute, Houston, TX

URL: <http://www.lpi.usra.edu/lpiintern/>

### **Planetary Biology Interns**

An 8-week research experience at various institutions for Jr and Sr Undergraduate

URL: [http://www.mbl.edu/education/courses/other\\_programs/pbi.html](http://www.mbl.edu/education/courses/other_programs/pbi.html)

### **Planetary Geology and Geophysics Interns**

An 8-week research experience for Jr and Sr Undergraduates at various institutions

URL: <http://www.acsu.buffalo.edu/%7Egregg/pggurp.html>

### **Planetary Science Summer School**

1 week mission training for senior Graduate Students and Post Doctorate at the Jet Propulsion Laboratory, Pasadena, CA

URL: <http://www2.jpl.nasa.gov/pscischool/>

## ● Program Opportunities

### **NASA Postdoctoral Program**

URL: <http://nasa.orau.org/postdoc/>

The NASA Postdoctoral Program (NPP) offers unique research opportunities to highly talented national and international individuals to engage in ongoing NASA research programs at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year Fellowship appointments are competitive and are designed to advance NASA's missions in space science, earth science, aeronautics, space operations, exploration systems, and astrobiology.

### **New Investigator Program in Earth Science**

URL: <http://nspires.nasaprs.com> (select "Solicitations" then "Open Solicitations" then "Research Opportunities in Space and Earth Sciences 2007" - see Appendix A.21) The New Investigator Program (NIP) in Earth Science is designed to encourage the integration of Earth system research and education by scientists and engineers at the early stage of their professional careers. The program encourages scientists and engineers at academic and/or research institutions to develop a broader sense of responsibility for effectively contributing to the improvement of science education and public science literacy; it provides an opportunity for the investigators to develop partnerships and/or enhance their skills, knowledge, and ability to communicate the excitement, challenge, methods, and results of their work to teachers, students, and the public. The Earth Science Division places particular emphasis on the investigators' ability to promote and increase the use of space-based remote sensing through the proposed research and education projects. All NIP proposals must contain both a research element that addresses one of the NASA Earth Science topical areas, as well as a significant program of education and outreach activities and/or interdisciplinary endeavors from which the community of practitioners in Earth, space, and environmental sciences can benefit.

### **NASA Astrobiology Institute programs**

Post Doctoral Fellows at <http://nasa.orau.org/postdoc/>

NAI Minority Institution Research Support at <http://www.nai-mirs.org/>

NAI Research Scholarships at <http://nai.arc.nasa.gov/funding/index.cfm#nrs>

**The Lunar and Planetary Science Conference** has several programs with information at <http://www.lpi.usra.edu/meetings/lpsc2007/lpsc2007.3rd.shtml>

NASA Proposal Writing Workshop

GSA Dwornik Student Paper Award

Education/Public Outreach Workshop: Engaging Multicultural Audiences in Planetary Science